ABSTRACT OF THE DISCLOSURE

One aspect of the present invention relates to a method for balancing the load of an n-dimensional array of processing elements (PEs), wherein each dimension of the array includes the processing elements arranged in a plurality of lines and wherein each of the PEs has a local number of tasks associated therewith. The method comprises balancing at least one line of PEs in a first dimension, balancing at least one line of PEs in a next dimension, and repeating the balancing at least one line of PEs in a next dimension for each dimension of the n-dimensional array. The method may further comprise selecting one or more lines within said first dimension and shifting the number of tasks assigned to PEs in said selected one or more lines.